

**Please amend the Abstract of the Disclosure as follows:**

A method is described for implementing a multidimensional linear block code on a frame of information symbols to be transmitted through a transmission system, the information symbols being organized in a frame with a number of columns and a number of rows. The method includes the steps of adding to the frame of information symbols a number of columns of redundancy symbols of a length equal to the number of rows of the frame of symbols to be transmitted; and of identifying the horizontal sequences, or rows, of information symbols and redundancy symbols as first code words. ~~It is characterized in that said~~ The redundancy symbols are constructed in such a way that, by interleaving the frame of information symbols and redundancy symbols, ~~by carrying out~~ using a permutation of the elements ~~of~~ within the columns, ~~the horizontal sequences, or rows,~~ rows of information symbols and redundancy symbols ~~of~~ produced from the permuted columns ~~are identified as~~ form second code words. Conveniently, such operation may be repeated to obtain multidimensional codes.